

AMBALA COLLEGE OF ENGINEERING AND APPLIED RESEARCH
DEPTT. OF COMPUTER SCIENCE & ENGINEERING
LECTURE PLAN- (CSE-101N)

NAME OF FACULTY:		Dr. Poonam Rana (Theory)		Dr. Poonam Rana (Practical)
DISCIPLINE:		B.Tech.- Computer Science & Engineering		
SEMESTER:		VI		
SUBJECT:		Software Engineering		
LESSON PLAN DURATION:		13 WEEKS (8 January- 20 April, 2020)		
WORK LOAD PER WEEK (IN HOURS)		L:T:P- 3:1:3		
Theory			Practical	
Week	Lecture No.	Topic (including assignment & Test)	Practical No.	Topic (including Viva-voce)
1ST	1	Introduction to Software Engineering	1	To identify the role of the software in today's world across a few significant domains related today to day life
	2	Software Characteristics, Software Crisis		
	3	The Evolving role of Software		
	4	Software Development Life Cycle (SDLC) Models: Water Fall		
2ND	5	Prototype Model, Spiral Model	2	To identify the problem related to software crisis for a given scenario
	6	Evolutionary Development Models, Iterative Enhancement		
	7	RAD, V Model		
	8	Revision Unit I		
3RD	9	Software Requirement Specification	3	To classify the requirement into functional and non-functional requirements
	10	Sessional Test I		
	11	Requirement Engineering Process: Elicitation, Analysis, Documentation		
	12	Review and Management of User Needs		
4TH	13	Feasibility Study	4	To implement at least four software metrics
	14	Data Flow Diagrams, Decision Tables		
	15	SRS Document, IEEE Standard for SRS		
	16	Software Quality, Concept of Software Quality Assurance		
5TH	17	SEI-CMM Model	5	Preparation of requirement document for Library Management System
	18	Introduction to Software Risk Management		
	19	Software Configuration Management		
	20	Revision of Unit II		
	21	Basic Concept of Software Design	6	

6TH	22	Modularization, Design Structure Charts		To prepare Project Schedule for Library Management System in standard format
	23	Pseudo Codes, Flow Charts		
	24	Coupling and Cohesion		
7TH	25	Design Strategies: Function Oriented Design	7	To implement the functional testing techniques
	26	Object Oriented Design		
	27	Top-Down and Bottom-Up Design		
	28	Software Measurement and Metrics		
8TH	29	Various Size Oriented Measures	8	To implement the structural testing techniques
	30	Halstead's Software Science		
	31	Function Point (FP) Based Measures		
	32	COCOMO		
9TH	33	Cyclomatic Complexity Measures	9	To identify different types of performance testing.
	34	Control Flow Graphs		
	35	Revision of Unit III		
	36	Sessional Test II		
10TH	37	Software Construction fundamentals	10	to identify the usage of sanity testing.
	38	minimizing complexity		
	39	Top-Down Programming		
	40	Bottom –Up programming		
11TH	41	structured programming	11	To understand usage of Software metrics.
	42	Compliance with Design and Coding Standards		
	43	Testing Objectives		
	44	Unit Testing, Integration Testing, system testing		
12TH	45	Acceptance Testing, Regression Testing	12	To classify the given defects into given defect types.
	46	Structural Testing, Functional Testing, debugging		
	47	Maintenance: key issues		
	48	Types of software Maintenance		
13TH	49	Cost of Maintenance	13	To map the listed activities to the project management phases.
	50	Software Re-Engineering		
	51	Revision of Unit IV		
	52	Sessional Test III		

(Teacher Signature with Date)